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19   UNITED STATES DISTRICT COURT
            NORTHERN DISTRICT OF CALIFORNIA
20   SAN FRANCISCO DIVISION

21 OPENTV, INC. and NAGRAVISION, SA,   CASE NO. 3:14-cv-01622-JST

22   Plaintiffs and   **PLAINTIFFS' OPENING CLAIM
                    Counterdefendants,   CONSTRUCTION BRIEF**
23
             v.   **Date:** March, 23, 2015
24   **Time:** 2:00 p.m.
     APPLE, INC.,   **Judge:** Honorable Jon S. Tigar
25   **Courtroom:** 9, 19th Floor
                    Defendant and
26   Counterplaintiff.

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I.   INTRODUCTION

The parties identified ten terms for the Court to construe pursuant to Patent Local Rule 4-2. Dkt. No. 95. OpenTV's proposed constructions for these disputed terms follow the Federal Circuit's framework for claim construction, stay true to the plain meaning of the claim language and intrinsic evidence, and reflect the language the inventors used to describe their invention. OpenTV respectfully requests the Court adopt its proposed constructions.

II.   LEGAL PRINCIPLES

While claim construction is a question of law, the words of the claims must be construed in view of their proper context and evidentiary underpinnings. *See, e.g.*, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 838 (2015). Claim terms "are generally given their ordinary and customary meaning," which "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc) (internal citation omitted). There are only two exceptions to this general rule: 1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm't Am.*, LLC, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Both exceptions require a clear and explicit statement by the patentee. *Id.* at 1367-68. To constitute disclaimer, for example, there must be a clear and unmistakable disclaimer. *Id.* at 1366-67. And to act as its own lexicographer, a patentee must "clearly set forth a definition of the disputed claim term" other than its plain and ordinary meaning. *Id.* at 1365.

A person of ordinary skill in the art "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips*, 415 F.3d at 1313. Proper claim construction relies primarily on an analysis of the patent's intrinsic evidence, i.e., the language of the claims, the specification, and the prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582-83 (Fed. Cir. 1996). For example, the patent's specification "is always highly relevant" to claim-construction analysis, as it "necessarily informs the proper construction of the claims." *Phillips*, 415 F.3d at 1315-16. "Usually, [the specification] is dispositive; it is the single best guide to the meaning of a disputed

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1   term." *Vitronics*, 90 F.3d at 1582. The specification also helps resolve ambiguous claim terms if "the

2   ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit

3   the scope of the claim to be ascertained from the words alone." *Teleflex, Inc. v. Ficosa N. Am. Corp.*,

4   299 F.3d 1313, 1325 (Fed. Cir. 2002).

5   It is improper, however, to read "unstated limitations" into the claim language, such as

6   details that are disclosed in the specification but are not recited in the claims. *See, e.g.*, *Rambus Inc.*

7   *v. Infineon Techs. Ag.*, 318 F.3d 1081, 1088 (Fed. Cir. 2003); *Thorner*, 669 F.3d at 1366-67. "We do

8   not import limitations into claims from examples or embodiments appearing only in a patent's

9   written description, even when a specification describes very specific embodiments of the invention

10   or even describes only a single embodiment." *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424

11   F.3d 1324, 1335 (Fed. Cir. 2005). A court may also consider extrinsic evidence, but such evidence is

12   less reliable and less significant than the intrinsic record. *Phillips*, 415 F.3d at 1317-18.

13   **III.   THE '799 PATENT**

14   On April 26, 1995, inventors Brian Dougherty and Eric Del Sesto filed an application that

15   became U.S. Patent No. 5,689,799. The '799 Patent, titled "Method and Apparatus for Routing

16   Confidential Information," generally "relates to broadcast and receiving systems, and more

17   specifically, to interactive broadcast and receiving systems." Ex. 1, '799 Patent, at 1:17-19.[1]

18   Prior to the invention, users would physically walk into a store or call a vendor using a

19   telephone, for example, to order a product seen on television. The inventors recognized that

20   communications over existing computer networks were "not [] suitably secure to allow a user to

21   conveniently and inexpensively communicate confidential information to a vendor." *Id.* at 1:48-52.

22   The '799 Patent describes systems and methods for transmitting user data, such as confidential

23   purchase information or other sensitive user data, through an interactive information system without

24   requiring the user to send that sensitive or confidential data over unsecure communication lines. *Id.*

25   at 1:65-2:3. Instead, users send certain identifiers and information to a response collector component

26   over the unsecure communication lines. *Id.* at Fig. 23. The response collector in the disclosed

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28   [1] Exhibits refer to those attached to the accompanying Declaration of Stephen E. Kabakoff.

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1   embodiments "react[s] to the receipt of responses sent by a reception component . . . by sending user

2   information and other information to vendor ordering equipment." *Id*. at 24:54-25:11.

3   **A.**   **"a response collector component . . ." [Claim 1]**

Claim Term	OpenTV's Proposal	Apple's Proposal
"a response collector component for storing the application identifier and vendor routing information, associating the application identifier with the vendor routing information, receiving the application identifier and user response information from the reception component, and transmitting the user response information to the vendor associated with the application identifier received"	Plain and ordinary meaning This term is not governed by 35 U.S.C. § 112(6)	Governed by 112(6). Function: to (1) store the application identifier and vendor routing information, (2) associate the application identifier with the vendor routing information, (3) receive the application identifier and user response information from the reception component, and (4) transmit the user response information to the vendor associated with the application identifier received. Structure: an industry standard UNIX-based computer system coupled to at least one modem, as described at 24:67-25:3, which is insufficient structure for the recited function. If the Court finds that 112(6) is inapplicable, the term "response collector component" is indefinite.

18   The parties dispute: (1) whether the claim term "a response collector component . . ." is a

19   means-plus-function term that must be construed under 35 U.S.C. § 112(6)[2]; and (2) whether the

20   term is indefinite. Regarding (1), there is a strong presumption that a claim term is not subject to

21   § 112(6) where, as here, it fails to recite the phrase "means for." *Williamson v. Citrix Online, LLC*,

22   770 F.3d 1371, 1378-79 (Fed. Cir. 2014). Apple cannot overcome this presumption because the

23   claimed "response collector component" is not purely functional claiming and recites structure

24   beyond a generic "means." Even if the term were construed as a means-plus-function term (which it

25   is not), Apple's proposed construction is still incorrect because Apple identifies a corresponding

26

27   [2] 35 U.S.C. § 112(6) was replaced with § 112(f) by the America Invents Act, which took effect on
September 16, 2012. Because the '799 Patent was filed before the effective date of the AIA, the
28   pre-AIA § 112(6) is applicable. *See Williamson*, 770 F.3d at 1376 n.2.

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1 structure then inconsistently concludes there is "insufficient structure." Regarding (2), the claim term

2 is not indefinite as evidenced by the specification, prosecution history, and Apple's own ability to

3 understand this claim term with enough certainty to identify it in alleged prior art. A term cannot be

4 indefinite and, at the same time, definite for purposes of invalidity. *Enzo Biochem, Inc. v. Applera*

5 *Corp.*, 599 F.3d 1325, 1332 (Fed. Cir. 2009) ("a claim cannot be both indefinite and anticipated").

6 As discussed below, this claim term should be construed based on its plain and ordinary meaning.

1. The "response collector component . . ." Claim Term Is Not a Means-Plus-Function Term Under 35 U.S.C. § 112(6)

9 Section 112, para. 6 provides that "[a]n element in a claim for a combination may be

10 expressed as a means or step for performing a specified function without the recital of structure,

11 material, or acts in support thereof." 35 U.S.C. § 112(6) (1994). The Federal Circuit has held that

12 there is a "strong presumption" that § 112(6) does not apply if a claim term does not recite the

13 phrase "means for," such as the "response collector component" term in claim 1 of the '799 Patent.

14 *See, e.g., Williamson*, 770 F.3d at 1378. "To rebut this strong presumption, it must be demonstrated

15 that skilled artisans, after reading the patent, would conclude that [the] claim limitation is so devoid

16 of structure that the drafter constructively engaged in means-plus-function claiming." *Id.*

17 In *Williamson*, the Federal Circuit held that the defendants failed to overcome the strong

18 presumption that the term "distributed learning control module" was not subject to § 112(6), *id.* at

19 1380, finding that a "module" is not a mere nonce word like a "means" and instead connotes either

20 hardware or software structure to persons skilled in the computer arts. *Id.* at 1379. Similarly here, the

21 claimed "response collector component" connotes structure to persons of ordinary skill in the

22 computer arts. *See* Declaration of Dr. Tim A. Williams ("Williams Dec.) at ¶ 26; *see also* Ex. 1 at

23 24:67-25:3 ("response collector forwarding *equipment*"). Accordingly, unlike structureless nonce

24 words such as "means for," the "response collector component" term provides sufficient structure—

25 it is not a means-plus-function term under § 112(6).

26 Even if the term were subject to § 112(6) (which it is not), the specification discloses

27 sufficient structure for performing the claimed function. Apple's proposed construction

28 acknowledges that the specification discloses at least "an industry standard UNIX-based computer

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1   system coupled to at least one modem" corresponding to the structure of the "response collector

2   component." Ex. 1 at 24:67-25:3. Apple incorrectly contends, however, that this disclosed structure

3   is "insufficient" to store, associate, receive, and transmit information as recited in claim 1. To the

4   contrary, a person of ordinary skill in the art would have understood that the disclosed UNIX-based

5   system and at least one modem could be configured to implement the claimed "response collector

6   component," and would have known how to create specialized software to configure the UNIX-

7   based system and modem as claimed. Williams Dec. at ¶¶ 21-24.

<div align="center">

2.   The Claimed "response collector component" Is Definite

</div>

9   The "response collector component" term is not indefinite because its scope can be

10 determined with more than reasonable certainty based on the term's plain and ordinary meaning. *See*

11 *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014); 35 U.S.C. § 112(2).

12   First, Apple cannot reasonably contend that the meaning of the claimed "response collector

13 component" is indefinite when Apple itself repeatedly interpreted and applied this claim term. For

14 example, before exchanging any claim constructions, Apple understood this claim term with enough

15 certainty to allege its existence in the prior art. *See, e.g.*, Ex. 15, Apple's Preliminary Invalidity

16 Contentions, Ex. C (allegedly identifying the claimed "response collector component" in 13 different

17 references). In its motion to dismiss, Apple again understood the plain meaning of the claimed

18 "response collector component" with enough reasonable certainty to identify structure corresponding

19 to the claim term in the specification. *See e.g.* Dkt. No. 97 at 6, 7, 16.

20   Further, a person of ordinary skill in the art would have understood the scope of the claimed

21 "response collector component" from its plain meaning in light of the specification and prosecution

22 history. Williams Dec. at ¶ 27. Figure 23 and its related description, for example, disclose an

23 embodiment of a "response collector component" that may be configured as recited in claim 1. Ex. 1

24 at FIG. 23; 2:32-35; 24:51-67. The prosecution history further supports that this claim term can be

25 understood based on its plain meaning. For example, the inventors explained that "[b]y transmitting

26 the application identifier and user identifier [to the response collector], the claimed invention is

27 compatible with low-bandwidth transports while retaining the capability to route user responses to a

28 vendor for processing. Furthermore, the user identifiers may be sent over unsecured communication

<div align="center">5</div>

1   lines since they do not constitute confidential information." Ex. 2 at OPENTV0001607.

2   The patentee did not redefine or disclaim any of the terms or phrases recited in the "response

3   collector component" claim term. Williams Dec. at ¶ 27. Accordingly, a person of ordinary skill in

4   the art at the time of the invention would have readily understood the scope of the claimed "response

5   collector component" according to its plain meaning. This term is not indefinite.

6   **B.   Claim Preambles Are Not Limiting [Claims 1 and 3]**

Claim Term	OpenTV's Proposal	Apple's Proposal
Claim preambles	Plain and ordinary meaning The preambles of claims 1 and 3 are not limiting.	The preambles of claims 1 and 3 are limiting, and their constructions are governed by the plain and ordinary meaning.

11   Both parties agree that the preambles of claims 1 and 3 should be construed according to

12   their plain and ordinary meanings. The parties dispute, however, whether the claim preambles should

13   be viewed as affirmative claim limitations, contrary to the general rule against reading claim

14   preambles as express limitations. The claim language, specification, prosecution history, and

15   doctrine of claim differentiation all support OpenTV's view that the preambles recite an intended

16   purpose of the invention and are not limiting. *Allen Engineering Corp. v. Bartell Industries, Inc.*, 299

17   F.3d 1336, 1347 (Fed. Cir. 2002) (finding the claim preamble "should be construed as merely setting

18   forth the intended purpose of the claimed combination, and should be given no limiting meaning").

19   The Federal Circuit has held that "[g]enerally, the preamble does not limit the claims." *Am.*

20   *Med. Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1358-59 (Fed. Cir. 2010). To be limiting, a preamble

21   must recite "essential structure or steps" or be "necessary to give life, meaning, and vitality to the

22   claim." *Id*. But "when the claim body describes a structurally complete invention such that deletion

23   of the preamble phrase does not affect the structure or steps of the claimed invention," when the

24   preamble is duplicative, or when it "merely gives a descriptive name to the set of limitations in the

25   body of the claim," the preamble is not limiting. *Id*. (citations omitted).

26   While the preamble of claim 1 recites a "system for routing confidential user information to a

27   vendor," the inventive system defined in the body of claim 1 neither recites, nor requires, any

28   routing of "confidential user information." In other words, the body of claim 1 describes a

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1   structurally complete system—deleting the preamble does not affect the claimed invention. *Id.*

2   Rather, the preamble recitation of a "system *for* routing confidential information" is an intended use

3   of the invention, not a requirement. *See, e.g.*, *Allen*, 299 F.3d at 1347. Similarly, the body of claim 3

4   recites all of the method steps necessary to practice the invention, none of which requires routing

5   any "confidential user information" as recited in its preamble. Like claim 1, the preamble of claim 3

6   does not affect the scope of the claimed invention.

7   Further, the preamble term "routing confidential user information" does not provide a

8   necessary antecedent basis for any claim term in the bodies of the claims. "Thus, the claim drafters

9   did not rely on the preamble language to define or refine the scope of the asserted claims." *Biolitec*,

10   618 F.3d at 1359. And the inventors did not add the phrase "routing confidential user information" to

11   distinguish their invention from any prior art. *Compare* Ex. 2 at OPENTV0001365-67 (originally

12   filed claims in '799 Patent) *with* OPENTV0001478-80 (amended claims); *see also Biolitec*, 618 F.3d

13   at 1359 (finding absence of amendment to preamble supported that preamble was not limiting).

14   OpenTV's position that the preambles are not limiting is strengthened by the doctrine of

15   claim differentiation. Dependent claims 5 and 15 each recite the disputed preamble language of

16   "confidential information." By claim differentiation, however, independent claims 1 and 3 must be

17   broader in scope than their dependent claims 5 and 15. *Phillips*, 415 F.3d at 1314-15 ("a dependent

18   claim that adds a particular limitation gives rise to a presumption that the limitation in question is not

19   present in the independent claim"); *see also* 35 U.S.C. § 112(4). Thus, finding the preambles limiting

20   would improperly introduce redundancy into dependent claims 5 and 15.

21   **IV.   THE '033 PATENT**

22   The '033 Patent, titled "Internet Filtering System for Filtering Data Transferred Over the

23   Internet Utilizing Immediate and Deferred Filtering Actions," was filed on May 15, 1996. At the

24   time of '033 Patent, the Internet was still in a nascent stage, and Spyglass, Inc., the patent's named

25   assignee, created one of the first Internet web browsers called Mosaic. *See* Ex. 3, '033 Patent, at

26   2:63-66. Also around that time, Congress passed the Communications Decency Act (CDA) to

27   prohibit dissemination of indecent material over the Internet. *Id.* at 1:12-20. Many viewed the CDA

28   as censorship and believed that parents should be responsible for controlling their children's

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activities on the Internet. *Id*. at 1:20-24. To address the problem of the accessibility of indecent material over the Internet, the inventors developed a system and method that allowed users, such as parents, to filter transmissions of such objectionable material. *Id*. at 1:27-29.

The patented system and method includes a database of filtering information that is used to determine whether to allow or block a data transmission. The database includes two types of filters: filters specifying an immediate action (also referred to as a direct action) and filters specifying a deferred action. *Id.* at 4:12-15; 11:36-37. The immediate-action filters direct the system to immediately carry out an action of allowing or blocking the transmission. *Id.* at 4:15-20. In contrast, the deferred-action filters determine whether to allow or block the transmission based on conditions, such as an expected filter pattern (typically a string of characters) in the transmission, and do not have the immediacy requirement of the immediate-action filters. *Id.* at 6:19-42; Fig. 3, steps 104 and 116. Based on a comparison of information in a message to the immediate-action and/or deferred-action filters, the system determines whether to allow or block the transmission. *Id.* at 1:33-35.

During prosecution of the '033 Patent, the inventors made clear that the claimed "filters" "operate between the presentation and application levels (layers 6 and 7, respectively) of the seven-level ISO protocol model," in order to distinguish prior art that had filters operating between the "network interface hardware (level 2) and the network software (level 3)." Ex. 4 at OPENTV0001992. Thus, the inventors unmistakably disclaimed any "filters" other than those operating between the application and presentation levels to gain allowance of the claims.

The ISO protocol model was developed by the Open System Interconnection committee of the International Organization for Standardization (ISO) to describe how data can be transmitted between computer systems. *See* Ex. 5 at 21-22. The ISO protocol model specifies seven protocol levels, sometimes referred to as "layers," each associated with a set of corresponding functionality. Williams Dec. at ¶ 13. Data may be received at a protocol level, processed in accordance with functionality associated with that level, and then passed to an adjacent protocol level for further processing. *Id.* at ¶ 14. For example, application data may be passed across the software interface between the presentation and application levels. *Id.* The representative figure below illustrates the levels of the ISO protocol model for data transmissions between computers systems A and B.

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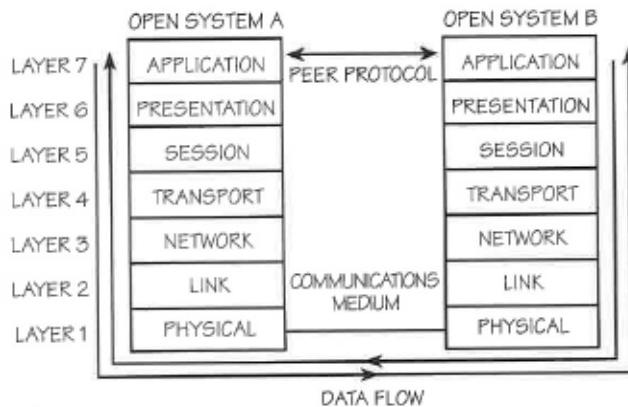
Ex. 5 at 22. The seven-level ISO protocol model would have been known to persons of ordinary skill in the art at the time of the '033 Patent and is generally described, for example, in the accompanying Declaration of Dr. Tim A. Williams at ¶¶ 8-17.

A.   "filters specifying immediate action" [Claims 1, 15, 23]

Claim Term	OpenTV's Proposal	Apple's Proposal
"filters specifying immediate action"	"filters specifying whether to allow or block a transmission immediately and operate between the presentation and application levels of the seven-level ISO protocol model"	"filters specifying whether transmission of the message should be unconditionally allowed or blocked based on a port number or network address specified in the message"

The parties dispute the following issues regarding the meaning of the claimed "filters specifying immediate action": (i) whether the claimed "filters" specify whether to allow or block a transmission "immediately," as specified in the claim language, or merely "unconditionally" as proposed by Apple; (ii) whether the filters "operate between the presentation and application levels of the seven-level ISO protocol model" based on the applicants' clear and unmistakable disclaimer during prosecution; and (iii) whether the claimed "filters" must be restricted to filters that allow or block transmission "based on a port number or network address" where the claim language, specification, and prosecution history imposes no such restriction.

First, as the plain language of the claim term indicates, the "filters specifying *immediate action*" allow or block transmissions "immediately" as proposed by OpenTV. The specification is in accord. Ex. 3 at 4:15-20 ("Direct actions indicate that the system should unconditionally allow or unconditionally block the transmission. When filter entries are retrieved, they are first scanned for

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1   entries that require direct action; if there are any, *these actions are carried out immediately*."); 4:45-

2   50. Apple's proposed construction is deficient because it fails to account for the timing requirement

3   of the claimed "filters specifying *immediate* action." While Apple proposes that the claimed

4   immediate-action filters allow or block "unconditionally," Apple's construction omits the

5   immediacy requirement in the claim language and specification.

6   Second, OpenTV's proposed construction is the only one that accounts for the fact that,

7   during prosecution, the inventors unequivocally disclaimed the scope of the claimed "filters

8   specifying immediate action" as being limited to filters that operate between the presentation and

9   application levels of the seven-level ISO protocol model. *See*, *e.g.*, *Biogen Idec, Inc. v.*

10 *GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013) ("a clear and unmistakable disavowal

11 during prosecution overcomes the heavy presumption that claim terms carry their full ordinary and

12 customary meaning") (internal quotations omitted). More specifically, the applicants clearly and

13 unmistakably disclaimed the scope of the claimed "filters" as operating "between the presentation

14 and application levels (layers 6 and 7, respectively) of the seven-level ISO protocol model" to

15 distinguish the prior-art filters in U.S. Patent No. 5,606,668 ("Schwed"):

16   As discussed during the interview, *the Schwed system and*
17   *Applicants' methods operate at different layers of the seven-level*
            ISO communication protocol model . . . . As made clear at Fig. 5
18   and col. 6 ll. 3-7, the packet filters of Schwed operate between the
            network interface hardware (level 2) and the network software
19   (level 3). *Applicants' filtering methods, by contrast, operate*
            between the presentation and applications levels (layers 6 and 7,
20   *respectively) of the seven-level ISO protocol model.* Schwed . . .
            specifically *teaches away* from a system operating on the
21   applications level (layer 7) of the ISO communication protocol
            model, such as Applicants' filtering methods[.]
22

23   Ex. 4 at OPENTV0001992 (emphases added); *see also id.* at OPENTV0002063. In view of

24 the applicants' disclaimer of claim scope made during prosecution, the claimed "filters specifying

25 immediate action" are limited to operate between the presentation and application levels of the

26 seven-level ISO protocol model, as OpenTV proposes.

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1   Apple's attempt to limit the claimed "filters specifying immediate action" based on "a port

2   number or network address" should be rejected.[3] For starters, Apple's construction is not supported

3   by the plain language of the claims. The claims do not recite nor require the use of any port numbers

4   or network addresses for filtering as Apple contends. Further, dependent claim 3 recites "The

5   method of claim 1, wherein in step (b) the filters specifying immediate action comprise fields

6   specifying an *interface port*, an *Internet Protocol (IP) address*, and an action to be taken if the

7   filtering information matches the information in the message." Apple's attempt to add a "port

8   number or network address" requirement in the meaning of the "filters specifying immediate action"

9   would improperly render the limitations in dependent claim 3 superfluous, thereby violating the

10   statutory requirement that a dependent claim further limits its parent claim. *See* 35 U.S.C. § 112(4).

11   Apple's construction also improperly attempts to import disclosed but unclaimed details from

12   the specification. *See*, *e.g.*, *Phillips*, 415 F.3d at 1320 ("one of the cardinal sins of patent law—

13   reading a limitation from the written description into the claims"). Contrary to the "port number or

14   network address" requirement in Apple's construction for "filters specifying immediate action," the

15   specification merely discloses that "filters in the database *preferably* have fields for port number and

16   IP address. These fields *can* include a specific port number, a specific IP address, and/or meta values

17   ANY IP and ANY PORT, which stand for all possible IP addresses and all possible port numbers,

18   respectively." Ex. 3 at 3:67-4:5 (emphasis added); 4:15-17, 40-50.

19   Apple's construction also uses the ambiguous term "network address." Instead of using a

20   term such as "IP address" that appears throughout the patent specification, Apple uses "network

21   address" which is a term that does not appear anywhere in the '033 Patent and can confuse the jury

22   with respect to what falls within the scope of "network address."

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27   [3] Apple initially construed the term "filters specifying immediate action" to have a plain meaning
before proposing its current construction adding a "port number or network address" restriction.

28   *Compare* Ex. 6, Apple's Patent Local Rule 4-2 Disclosure, at 10 *with* Dkt. No. 95-1 at 1.

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B.   "filters specifying deferred action" [Claims 1, 15, 23]

Claim Term	OpenTV's Proposal	Apple's Proposal
"filters specifying deferred action"	"filters specifying whether to allow or block a transmission conditionally and operate between the presentation and application levels of the seven-level ISO protocol model"	"filters specifying whether transmission of the message should be allowed or blocked based on information in the message other than a port number or network address"[4]

Like the claim term "filters specifying immediate action" discussed above, the parties

similarly dispute whether the claim term "filters specifying deferred action" (i) "operate between the

presentation and application levels of the seven-level ISO protocol model"; and (ii) whether the

claimed "filters" must be restricted to filters that allow or block transmission "based on information

in the message other than a port number or network address" where the claim language,

specification, and prosecution history impose no such restriction.

The specification supports OpenTV's construction. Unlike "filters specifying immediate

action" that immediately allow or block a transmission, the claimed "filters specifying deferred

action" conditionally allow or block the transmission when one or more conditions are satisfied,

such as when a particular string or pattern is detected in the data. *See, e.g.*, Ex. 3 at 5:8-15; Figs. 3-4.

In one embodiment, for example, "[t]he system can defer the decision whether to allow or block, and

then monitor transmissions to search for a particular command and a particular filter pattern." *Id.* at

1:45-47; *see also* 6:30-32-35; 5:19-29; 6:10-42.

As explained above for the claim term "filters specifying immediate action," during

prosecution the inventors clearly and unmistakably disclaimed the scope of the claimed "filters" as

being limited to filters that operate between the presentation and application levels of the seven-level

ISO protocol model, as proposed by OpenTV. *See*, *e.g.*, *Biogen*, 713 F.3d at 1095 ("a clear and

unmistakable disavowal during prosecution overcomes the heavy presumption that claim terms carry

their full ordinary and customary meaning"). That clear and unmistakable disclaimer regarding the

scope of the claimed "filters" applies equally to the claimed "filters specifying deferred action."

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[4] Apple initially construed this term to have a plain meaning. Ex. 6 at 10.

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1   Apple's construction should be rejected because it arbitrarily limits the scope of "filters

2 specifying deferred action." As discussed relative to "filters specifying immediate action" above,

3 there is nothing in the intrinsic record to support that "filters specifying deferred action" should be

4 limited based on information other than "a port number or network address." For example, the

5 claims do not recite or require any limitations relating to port numbers or network addresses.

6   Apple's construction for "filters specifying deferred action" is also deficient because it uses

7 the ambiguous term "network address," which does not appear anywhere in the '033 Patent.

8 **V.   THE '229 PATENT**

9   The '229 Patent, titled "Convergence of Interactive Television and Wireless Technologies,"

10 was filed on October 15, 2002. The sole inventor is Mr. Vincent Dureau, former Chief Technology

11 Officer of OpenTV. The '229 Patent relates to targeted content delivery mechanisms that may be

12 used for interactive television. *See* Ex. 7, '229 Patent, at 1:8-11. As described in the patent, a

13 television system typically included a television set connected to a set-top box. *Id.* at 1:15-18. In

14 addition to transmitting television programming to the set-top box, television providers could also

15 transmit data for interactive content. *Id.* at 1:18-37. This additional information could include data

16 associated with the television program, interactive graphics, or applications. *Id.* The problem with

17 prior-art systems, however, was that the same content was "pushed" to each of the subscribers

18 "regardless of whether or not the subscribers requested the data." *Id.* at 1:38-42. In other words,

19 interactive television programming was one-size-fits-all and not easily customized because

20 everybody received the same television programming and interactive content. *Id.*; *see also* 1:43-56.

21   To address these problems, the '229 Patent combined traditional television service, the

22 Internet, and wireless technologies, in a novel way to create a truly interactive, and personalized,

23 television experience. *See, e.g.*, *id.* 1:52-3:2. At its core, the '229 Patent solved a problem of keeping

24 television programming relevant in a world where everybody is connected through disparate,

25 interactive devices.

26   Figure 1 depicts an embodiment of the invention including a broadcast station 16 and a

27 receiving device 12. *Id.* at Fig. 1; 3:35-38; 44-46. Receiving device 12 may include any number of

28 devices including a set-top box, television set, video cassette recorder, personal computer, or cell

13

1   phone. *Id.* at 3:38-43. The broadcast station 16 and receiving device 12 are coupled through a

2   transmission medium 17, *id.* at 3:44-46, which may include any "appropriate system of

3   transmission," *id.* at 3:54-59. For example, the broadcast station may communicate with the set-top

4   box using the Internet. *Id.* at 6:47-49. The system also includes mobile unit 305, which

5   communicates with broadcast station 16 "through transmission medium 17, through a wireless phone

6   network, through a wireless internet network, or otherwise." *Id.* at 3:64-4:3.

7   A user interacts with this system using a variety of devices, such as a set-top box, cell phone,

8   or computer. *See id.* at 1:60-66. The system maintains a "user profile" which "reflects activity of the

9   user within the system." *Id.* at 1:66-2:1. The system obtains the information in the user profile from

10   various user actions, such as programs watched, channels watched, content accessed, websites

11   visited, purchase history, and a user's physical location. *Id.* at 2:60-63, 7:23-30, 7:46-51. The system

12   maintains and updates the user profile regardless from which device the user accesses the system.

13   For example, the system may update a user's profile to reflect that user's activities relating to

14   watching television programs. *See id.* at 2:1-10. Similarly, the same user profile may be updated to

15   reflect the user's activities performed on a cell phone or personal computer. *Id.*

16   The broadcast station is able to both send and receive data between a user's devices, such as

17   the set-top box and the mobile unit. *Id.* at 2:44-58, 6:42-64. Accordingly, "[c]ontent may be 'pushed'

18   to the mobile unit (i.e., sent without a user request) or 'pulled' (sent to the mobile unit based on a

19   user request or other action)." *Id.* This ability to communicate directly with a device, and the use of a

20   common user profile, allows the system to customize programming both to the user and/or device.

21   For example, the patent describes an embodiment where "a user's cell phone activity may affect the

22   information the user receives at home on their television, and vice versa." *Id.* at 2:8-10.

23   **A.   "set-top box" [Claims 6, 11, 14, 16, 18, 20, 21, 27]**

24

Claim Term	OpenTV's Proposal	Apple's Proposal
"set-top box"	"a device that receives a programming signal and outputs audio and video signals for presentation on a display"	"device that decodes and tunes television signals"

28   The intrinsic and extrinsic evidence support that a "set-top box" is a device that sits on top of

1   or near a video display, such as a television set—hence the name "set-top box"—and its purpose is

2   to receive a programming signal and output audio and video signals for presentation on the display,

3   as proposed by OpenTV. As discussed below, the "set-top box" may be used to present various types

4   of audio and video signals, such as for video games, Internet browsing, or television programming.

5   Apple takes an overly narrow view of this term and tries to limit the claimed "set-top box" to a

6   device that must "decode" and "tune" "television signals," thereby excluding many types of set-top

7   boxes disclosed in the specification and known in the art at the time of the invention. Apple's

8   construction lacks intrinsic support and adds unclaimed limitations to the claimed "set-top box."

9   The claims and specification support OpenTV's construction. Independent claim 14 specifies

10   that the claimed "set-top box" receives a "programming signal" from the "broadcast station," as

11   recited in OpenTV's proposed construction. Ex. 7 at 14:35-37. Further, the specification discloses

12   that the "set-top box" may receive signals from over the Internet and output signals to a display

13   device that allows a user to "send and receive e-mail, browse the world wide web, and perform other

14   internet related activities." *Id.* at 6:47-52; *see also* 2:23-24. While the specification discloses that the

15   "set-top box" is frequently "connected to a television set," *id.* at 1:15-18, a person of ordinary skill in

16   the art would have understood that a television set is one type of display device that could be

17   connected to the "set-top box," *e.g.*, for displaying downloaded content from the world wide web.

18   Whereas Apple's construction limits the claimed "set-top box" to a device that decodes and tunes

19   television signals, the claims, specification, and prosecution history, do not impose any limits on the

20   types of signals that the "set-top box" may receive from the broadcast station, the types of

21   processing it performs, or the types of audio and video signals it may output to a display device.

22   OpenTV's proposed construction is also consistent with the extrinsic evidence, which

23   indicates that a person of ordinary skill in the art at the time of the invention would have been aware

24   that set-top boxes were not limited to only decoding and tuning television signals as Apple contends.

25   For example, the *Internet and Technology Law Desk Reference* (2002) defines "set-top box" as

26   "[a] hardware component that plugs directly into a television receiver and requires no independent

27   computer system. *Set-top boxes can be used for video games or accessing the Internet* via cable

28   modems or direct broadcast satellite systems." Ex. 8 at 603 (emphasis added). In other words, it was

15

1   known in the art that "set-top boxes" could be used for applications, such as video games and

2   Internet browsing, which would not satisfy Apple's proposed requirement that the "set-top box"

3   must decode and tune television signals.

4   Similarly, "set-top box" is defined in *Interactive TV Technology and Markets* (2002) as:

5   [A] consumer electronics device that serves as a gateway between the
             TV and network. Any of several different electronic devices that may
6   be used in a customer's home to enable services to be on that
             customer's TV set. If the set-top device is for extended tuning of
7   channels only, it is called a converter. If it restores scrambled or
             otherwise protected signals, it is called a descrambler.
8

9   Ex. 9 at 383.

10   While Apple's proposed construction requires the claimed "set-top box" to both "decode"

11   and "tune" television signals, as shown above, a person of ordinary skill would have understood that

12   a "set-top box" could be used solely as a tuner, in which case it was called a "converter," or used

13   solely as a decoder, such as a "descrambler." *Id.* Apple is incorrect to impose requirements that the

14   claimed "set-top box" must be capable of both "decoding" and "tuning," which was not a

15   requirement of set-top boxes at the time of the '229 Patent. More accurately, a person of ordinary

16   skill in the art would have understood that "[t]here is no standard specification for a set-top box as

17   this is determined by the service broadcaster" and "[t]here are many different types of set-top boxes

18   available." Ex. 9 at 105. Contrary to Apple's construction, the extrinsic evidence reveals there were

19   many different types of set-top boxes, performing varied functions, at the time of the patent.

20   Apple's attempt to restrict the meaning of the claimed "set-top box" to a device that

21   "decodes" and "tunes" television signals also finds no support in the intrinsic evidence. Nowhere in

22   the patent is the "set-top box" described as receiving a "television signal" or "decod[ing]" or

23   "tun[ing]" any such signals. In fact, the words "decode" and "tune" do not appear anywhere in the

24   '229 Patent. Apple's proposed construction should be rejected for this reason alone. And while the

25   patent describes that a set-top box "may" receive "television programming," had the inventor sought

26   to limit the claimed set top box to those that "must" receive "television programming," he could

27   have said so. *See* Ex. 7 at 6:42-49. Moreover, as noted above, Apple's proposed construction is

28   contrary to the common understanding of "set-top box." The above definitions evidence that set-top

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1   boxes include devices for playing video games or accessing the Internet, neither of which requires

2   decoding or tuning television signals.

3   Unlike Apple's construction of the claim term "set-top box" that is unsupported by the

4   intrinsic and extrinsic evidence, OpenTV's is consistent with the evidence and should be adopted.

5   **B.   "broadcast station" [Claims 11, 14, 18]**

Claim Term	OpenTV's Proposal	Apple's Proposal
"broadcast station"	"station configured to deliver programming to multiple devices"	"station configured to deliver programming to all network destinations simultaneously"

9   The parties agree that a "broadcast station" is a "station configured to deliver programming,"

10   and only dispute whether the broadcast station must be configured to deliver programming

11   "to multiple devices" or, more restrictively, "to all network destinations simultaneously."[5] OpenTV

12   proposes that the broadcast station must "deliver programming to multiple devices" but not

13   necessarily simultaneously, consistent with both the intrinsic and extrinsic evidence. Apple's

14   construction, in contrast, requires a "simultaneous" requirement not disclosed anywhere in the '229

15   Patent and that directly contradicts the intrinsic and extrinsic evidence.

16   OpenTV's construction is supported by the intrinsic evidence. The specification discloses a

17   "broadcast station" that provides content to "a number of users." Ex. 7 at 2:44-45. In one

18   embodiment, the broadcast station "pushes" content to a remote device by transmitting the content

19   without having first received a user request for that content. *Id.* at 2:54-56; 6:61-64. In another

20   embodiment, the broadcast station provides content that has been "pulled" by a remote device, that

21   is, the broadcast station provides the content to the device in response to a specific request or action.

22   *Id.* OpenTV's proposed construction is supported by both the disclosed "push" and "pull"

23   embodiments, because the "broadcast station" provides content to multiple devices, but may do so

24   on an individualized basis, e.g., delivering "pulled" content to only a particular requesting device.

25

26   [5] In the joint claim construction statement (Dkt. No. 95-1), OpenTV proposed that "broadcast
27   station" means "a facility equipped both to convey signals to multiple devices and to receive signals
     from those devices." To highlight and clarify the dispute between the parties, in this brief OpenTV
28   has largely adopted Apple's proposed construction with a slight modification.

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1   The extrinsic evidence is in accord. At the time of the invention, there was a convergence of

2   traditional broadcasting (historically thought of as one-to-many) and telecommunications (one-to-

3   one) technologies. *See* Ex. 9 at 11 ("[W]ith the advent of digital compression systems, a number of

4   protocols . . . and a variety of delivery systems . . . the distinction between broadcast-type services

5   and telecommunications services are blurring."). Thus broadcasters were experimenting with

6   providing unique and personalized "me channel[s]" to television viewers. *Id.* For example, broadcast

7   providers were able to use Asymmetric Data Subscriber Lines ("ASDL") to provide each viewer

8   with their own "personal 'pipe'" of television programming. Ex. 10 at 64; Ex. 9 at 11-12

9   ("telecommunications operators are providing services such as video on demand (VOD), as well as

10   other broadcast services"). Using this model, the viewer could "pull" personalized content in a

11   dedicated, individualized stream from the broadcast provider. Ex. 10 at 63-65. Because the broadcast

12   provider and viewers were "able to address a specific data set" to one another "and no one else" (*id.*

13   at 101), this allowed for "two-way interactivity" not previously achieved in the traditional broadcast

14   model. And "[e]ach interactive television user can indeed request a separate and customized

15   program" to be "broadcast." *See id.* at 114. OpenTV's construction includes "broadcast stations" that

16   were known to provide individualized data transmissions to requesting devices, Apple's does not.

17   Apple's construction imposes a "simultaneous" limitation that is unsupported by the intrinsic

18   or extrinsic evidence (e.g., as discussed above). Apple requires the claimed "broadcast station" to

19   send the *same* programming to "all network destinations" "simultaneously," but there is no support

20   in the '229 Patent for such an interpretation. For example, the term "simultaneously" (and variations

21   thereof) is completely absent from the specification. Further, Apple's proposed "simultaneous"

22   limitation would exclude preferred embodiments where the "broadcast station" provides content to a

23   particular device on demand, *e.g.*, in a "pulled" configuration. *See, e.g.*, *id.* at 2:54-56; 6:61-64; *see*

24   *also Vitronics*, 90 F.3d at 1583-84 (a claim interpretation that excludes a preferred embodiment "is

25   rarely, if ever, correct"). Apple's construction also improperly excludes embodiments where "the

26   broadcast service provider can make available *to particular viewers* the programs which *they* are

27   most likely to watch or products and services which *they* are most likely to purchase" based upon the

28   user's profiles. *Id.* at 8:18-26 (emphases added). And Apple excludes embodiments where the

18

"broadcast station" allows a user to send and receive e-mails (*see id.* at 6:49-52), which surely are

not sent and received by all devices "simultaneously" as required by Apple's construction since

e-mails are personalized in nature. *See, e.g.*, Ex. 10 at 101 (services such as web surfing, multiplayer

gaming, and communications-based applications, such as chat, require a sender to address a specific

receiver and "no one else"). Apple's proposed construction cannot be correct.

C.   "activity [related / unrelated] to television viewing" [Claims 1, 5, 9, 14, 26]

Claim Term	OpenTV's Proposal	Apple's Proposal
"activity [related / unrelated] to television viewing"	"activity [related / unrelated] to watching television programming"	indefinite

The intrinsic record supports OpenTV's proposed construction for the claim terms "activity

[related/unrelated] to television viewing," which is consistent with the plain meaning of these terms

and the prosecution history. In contrast, Apple inconsistently contends that these terms are indefinite

even though Apple never identified either term as indefinite in its invalidity contentions and had no

issues mapping them to alleged prior art. Ex. 14 at 46-50 (contending that eleven prior art references

anticipate the asserted claims); *id.* at 55-56 (indicating Apple is not "presently aware" that any

claims are invalid as indefinite); *Enzo Biochem*, 599 F.3d at 1332 (observing that "a claim cannot be

both indefinite and anticipated" and holding that "[w]ithout a discernable claim construction, an

anticipation analysis cannot be performed.").

The claim terms "activity related to television viewing" and "activity unrelated to television

viewing" were added during prosecution to distinguish prior art, and the PTO expressed no difficulty

understanding the scope of these terms when examining the claims. During prosecution, the patent

examiner rejected the claims in view of U.S. Patent Pub. No. 2005/0028208 ("Ellis"). Ex. 11 at

OPENTV0002710-21. In response to the rejection, the applicant amended the claims to recite two

different types of activity: "activity related to television viewing" and "activity unrelated to

television viewing." *Id.* at OPENTV0002729-34. The applicant explained that this amendment

clarified that the claimed invention utilized a user profile that is shared across these different types of

activities. OPENTV0002723 ("For example, if the second user activity comprises an activity related

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1   to television viewing . . . and the first user activity comprises web browsing, then the user may be

2   presented with television program content that is based on a user profile that is modified according

3   to the web browsing activity of the user performed from a device that is not a television receiver").

4   Further, in distinguishing the cited prior art, the applicant provided the following examples of

5   activities either "related to television viewing" or "unrelated to television viewing":

Activity Related to Television Viewing	**Activity Unrelated to Television Viewing**
• remotely access program listings • schedule program reminders • adjust the parental control settings • access interactive television program guide functionality related to user preferences or 'favorites' settings • schedule recordings	• web browsing • shopping • gaming activity • email • chat • banking

12   *See* Ex. 11 at OPENTV0002723-27.

13   Each "activity related to *television viewing*" in the left column is a user activity related to

14   watching television programming, whether it is accessing television programming listings on a TV

15   guide, scheduling when to record television programming, adjusting settings related to what kind of

16   television programming can be viewed, etc. Accordingly, OpenTV's proposed construction of

17   "activity related to *watching television programming*" describes each of the activities in the left

18   column; OpenTV's proposed construction of "activity unrelated to watching television

19   programming" properly corresponds to the other types of activities listed in the right column.

20   Contrary to Apple's indefiniteness allegation, the PTO expressed no difficulty understanding

21   the scope of the claim terms "activity [related/unrelated] to television viewing" and, indeed, relied

22   on its understanding of these terms when allowing the claims over Ellis.

> Although Ellis describes updating a user profile responsive to a first user
> *activity related to television viewing* via a first device . . . and initiating a
> second user *activity unrelated to television viewing* by participating in a
> chat application via a second device . . . Ellis is completely silent as to
> accessing 'the user profile in response to the second user activity' . . . as
> required by all of the claims on appeal.

27   Ex. 11 at OPENTV0003948 (emphases added).

28   OpenTV offers a proposed construction that slightly varies from the plain language of the

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claim to reflect that the claimed activity is related (or unrelated) to watching television programming

content, such as a TV show or movie, as opposed to simply being related (or unrelated) to looking at

a physical television. For example, each of the applicant's identified activities in the left column

above is related to television programming (e.g., watching a television show). And while each of the

applicant's activities "unrelated to television viewing" in the right column may use a television set as

a physical display, for example using a television receiver/set as a screen when browsing the

Internet, the activity itself is "unrelated to television viewing" because it is unrelated to watching

television programming. The wording in OpenTV's proposed construction captures this distinction.

VI.   THE '287 PATENT

U.S. Patent No. 5,566,287, titled "Method for Asynchronously Maintaining an Image on a

Display Device," was filed on June 28, 1994. As described in the Background section of the patent,

in an object-oriented paradigm, an image drawn on a display device is made up of graphic elements

(for example, a text box or a clock) represented by graphic objects. Each graphic object has

attributes and methods for manipulating that object, which are invoked in response to messages sent

to that object. Example attributes of a graphic object include its position on the screen, its size, and

its color. A graphic object can also contain other objects. *See, e.g.*, Ex. 12, '287 Patent, at 1:1-53.

Prior to the '287 Patent, drawing and redrawing graphic objects on a display device could

utilize the majority of a processor's processing time. *Id.* at 1:39-43. The inventors realized, however,

that at any given time in the execution of an interactive computer program, other processing

functions may be more important in increasing the perceived response speed of the program than the

screen-drawing function. *Id.* at 1:48-51. The '287 Patent discloses a novel technique that increases

the perceived response speed of an application program, for example, "by making screen updates

asynchronous from graphic object attribute changes, and by placing the screen updates under the

control of the application program, and by giving the application program the option of updating

only a portion of the screen, or the complete screen." *Id.* at 9:47-53; *see also* 2:7-24.

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A.   "drawing request" [Claims 1, 5, 7]

Claim Term	OpenTV's Proposal	Apple's Proposal
"drawing request"	"a request to draw one or more graphic objects on the display device"	"notification that an attribute of a graphical object has changed"

OpenTV proposes that the claimed "drawing request" is "a request to draw one or more graphic objects on the display device," which is consistent with the object-oriented context of the claims and the intrinsic record. Apple's construction, however, attempts to define the broad term "drawing request" as being limited to a specific "notification" related to changing an attribute of a graphical object disclosed in a preferred embodiment. Apple's narrow construction is incorrect.

The claim language supports OpenTV's construction. Claim 1 recites "receiving a *drawing request* from the application program." Dependent claims 5 and 7 indicate that the claimed "drawing request" is a request to draw one or more graphic objects on the display device as proposed by OpenTV. Claim 5 recites that "the step of receiving a *drawing request* comprises the step of receiving *a request to draw a graphic object on the image . . .*" Claim 7 recites "the step of receiving a *drawing request* comprises the step of receiving *a request to move a graphic object on the image*."

The specification further supports that the claimed "drawing request" is a request to draw one or more graphic objects, as proposed by OpenTV. For example, the specification discloses drawing multiple graphical objects in response to a request to move a graphic object from one location on the display device to another. *See, e.g.*, Ex. 12 at 8:7-13; *see also* 1:28-31.

The prosecution history reinforces that one or more graphic objects are drawn on the display device in response to a "drawing request" as proposed by OpenTV. *See* Ex. 13 at OPENTV0001242 (May 9, 1996, Amendment) ("The invention recited in claim 1 relates to a display manager in a processing system. Such a display manager controls *the drawing of graphic objects on a display screen in response to requests* from an application program") (emphasis added).

Apple's construction improperly attempts to narrow the scope of the claims by importing a specific feature from a preferred embodiment. *See, e.g.*, *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 803 (Fed. Cir. 2007). Apple erroneously tries to equate the claimed "drawing request" with a change in an attribute of a graphic object as described in a preferred embodiment. However, the claim

1   broadly calls for a "drawing request," and a person of ordinary skill in the art at the time of the '287

2   Patent would have understood there are multiple ways of implementing the claimed "drawing

3   request," including implementations that do not require changing "an attribute of a graphical object"

4   as Apple contends. *See* Declaration of Dr. Ben Bederson ("Bederson Dec.") at ¶ 14. For example,

5   the "drawing request" may result from instantiating a new graphical object or refreshing the display

6   of an existing graphical object, neither of which requires changing an attribute as Apple proposes. *Id.*

7   Apple's construction also incorrectly requires a "notification" instead of a "request." Even

8   the preferred embodiment discloses a request rather than a notification. Ex. 12 at 3:19-27 (disclosing

9   "a *request* for such an attribute change"). Thus, when the application program changes the attribute

10   of a graphic object in this disclosed embodiment, a "request" (as proposed by OpenTV), not a

11   "notification" (as proposed by Apple), is made to change the attribute of the graphic object.

12   **B.   "image update request" [Claims 1, 16]**

Claim Term	OpenTV's Proposal	Apple's Proposal
"image update request"	"a request to redraw one or more graphic objects on the display device"	"instruction to initiate a screen redraw"

16   The parties agree that the claim term "image update request" involves a redraw, but the

17   parties disagree as to: (1) whether one or more graphics objects or the entire screen is redrawn; and

18   (2) whether an "image update *request*" is a request or an instruction.

19   The intrinsic evidence supports OpenTV's construction that the "image update request"

20   redraws "one or more graphic objects" rather than a complete "screen redraw" on the display device.

21   Independent claim 1 recites "receiving an image update request from the application program."

22   Claim 16, which depends from claim 1, recites "the step of receiving a screen update request

23   comprises the step of *receiving a request for update the complete image*; and the method further

24   comprises the step of repeating the retrieving and requesting steps in response to the received

25   *complete image update request*." Since claim 16 specifically calls for a "complete image update

26   request," the "image update request" recited in claim 1 is not limited to a full "screen redraw" of all

27   graphic objects as Apple proposes. *See also* Bederson Dec. at ¶ 16.

28

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1   The specification also supports OpenTV's construction. The specification discloses "giving

2 the application program the option of *updating only a portion of the screen, or the complete screen*,"

3 Ex. 12 at 9:49-53 (emphasis added), where an image on the screen "is made up of graphic objects

4 drawn on the display screen," *id.* at 1:8-9. Thus, an "image update request" is a request to redraw

5 one or more graphic objects, e.g., depending on whether only a portion of the screen or the complete

6 screen is updated, or whether only a single graphical object is displayed on the screen, consistent

7 with OpenTV's proposed construction. *See also* Bederson Dec. at ¶ 17.

8   In contrast, Apple's construction is contradicted by the intrinsic evidence. Apple's

9 construction implies that the claimed "image update request" must be limited to a complete screen

10 redraw. Dependent claim 16, however, specifically limits the "image update request" in claim 1 to a

11 "*complete image* update request." Thus, under principles of claim differentiation, the "image update

12 request" in claim 1 cannot be limited to a complete "screen redraw" as Apple proposes. Also

13 contrary to Apple's construction, the specification discloses that an application program may have

14 "the option of updating only a portion of the screen, or the complete screen." *Id*. at 9:50-51. Apple's

15 construction fails to provide this option and is inconsistent with the specification.

16   Additionally, an "image update request" is a *request* and not an "instruction to initiate" as

17 Apple proposes. For at least these reasons, Apple's construction should be rejected.

18
19
    C.   **"requesting that respective graphic objects be redrawn if any portion of the graphic object lies within the drawing area represented by the retrieved entry" [Claim 1]**

20

Claim Term	OpenTV's Proposal	Apple's Proposal
"requesting that respective graphic objects be redrawn if any portion of the graphic object lies within the drawing area represented by the retrieved entry"	"No construction is necessary because the plain and ordinary meaning of this phrase can be easily understood by the jury"	"commanding every object that overlaps the drawing area represented by the retrieved entry to call low level graphics routines to redraw itself."

21
22
23
24

25   The parties dispute whether the claim phrase "requesting that respective graphic objects be

26 redrawn . . ." in claim 1 needs construction. Because the plain and ordinary meaning of this phrase

27 can be easily understood from the claim language alone, and the patentees did not redefine or

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1 disclaim any of the plain meanings in this claim term or otherwise ascribe a special meaning to this

2 phrase, no construction is required.

3   Apple, however, proposes a construction of this phrase that attempts to rewrite the claim

4 language in a manner that improperly imports a feature from the preferred embodiment into the

5 claims and that is directly at odds with the intrinsic record. Apple's construction redefines the plain

6 language of this claim phrase to insert unclaimed requirements that every object allegedly must be

7 "commanded" to redraw itself using calls to "low level graphics routines." As such, Apple

8 improperly imports disclosed but unclaimed features from the preferred embodiment into the

9 claims, such as Apple's requirement that "every object . . . call low level graphic routines to redraw

10 itself." Although the specification discloses an embodiment in which low-level graphic routines are

11 called when a graphic object is redrawn, there is no disclaimer in the specification or prosecution

12 history that would limit the claim scope to this one disclosed embodiment. *See*, *e.g.*, Ex. 12 at 5:40-

13 44; 6:44-46. To the contrary, a person of ordinary skill in the art at the time of the invention would

14 have understood that there are multiple ways of implementing how graphic objects are redrawn and

15 that using low-level graphic routines is just one example. Bederson Dec. at ¶¶ 19-20.

16   Apple's construction is also contrary to the claim language because it replaces the claim term

17 "graphic object" with "object." Objects other than graphic objects would fall within the scope of

18 Apple's proposed construction, which is directly at odds with the express claim language requiring

19 "graphic objects." There is no support in the intrinsic record for redefining the claimed "graphic

20 object" with "object" as Apple proposes. Indeed, a person of ordinary skill in the art would have

21 understood that a graphic object is a type of object in object-oriented programming. *Id.* at ¶ 21.

22   Finally, "commanding," which is in Apple's proposed construction, is not equivalent to

23 "requesting," which is in the claim phrase.

24 **VII.   CONCLUSION**

25   OpenTV requests that the Court adopt its proposed constructions, which are consistent with

26 the claim language, specification, prosecution history, and the law of claim construction.

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